

DM - Diabetes Mellitus

DM-C COMPLICATIONS

OUTCOME: The patient/family will understand that serious complications may occur as a result of long-term uncontrolled blood glucose.

STANDARDS:

1. Emphasize that the end-organ damage (e.g., kidney failure, blindness, heart attack, impotence, limb amputations) results from long-term high blood glucose.
2. Emphasize that optimal blood glucose control can reduce the risk of complications and end-organ damage.
3. Explain that routine examinations are essential and monitoring for complications is required.
4. Discuss common complications of uncontrolled high blood glucose (e.g., blindness, impotence, increased yeast infections, increased urinary tract infections, kidney failure, loss of limbs, heart attack, stroke, early death).
5. Explain that patients with Type 2 DM are at high risk for infectious diseases. Review the current recommendations for immunizations and refer for immunization as appropriate. **Refer to IM.**
6. Explain that patients with Type 2 DM are at high risk for visual loss. Review the current recommendations for eye examinations and refer to appropriate health-care providers. **Refer to ODM.**
7. Explain that uncontrolled blood glucose can result in small-vessel damage in the heart which leads to heart attacks and cannot usually be treated. Explain that Type 2 DM also worsens atherosclerotic disease, which can also lead to heart attacks and strokes. **Refer to CVA, CAD, and PVD.**

DM-CM CASE MANAGEMENT

OUTCOME: The patient/family/caregiver will understand the importance of integrated case management in achieving optimal physical and behavioral health.

STANDARDS:

1. Discuss roles and responsibilities of each member of the care team including the patient, family/caregiver, and providers in the case management plan.
2. Explain the coordination and integration of resources and services in developing and implementing the case management plan.

3. Explain the need to obtain the appropriate releases of information necessary to support integrated case management and to maintain patient privacy and confidentiality. **Refer to AF-CON.**

DM-CUL CULTURAL/SPIRITUAL ASPECTS OF HEALTH

OUTCOME: The patient/family will understand the impact and influences cultural and spiritual traditions, practices, and beliefs have on health and wellness.

STANDARDS:

1. Explain that the outcome of disease processes may be influenced by choices related to health and lifestyles, e.g., diet, exercise, sleep, stress management, hygiene, full participation in the medical plan. (Stoic Fatalism)
2. Discuss the potential role of cultural/spiritual traditions, practices and beliefs in achieving and maintaining health and wellness.
3. Explain that traditional medicines/treatments should be reviewed with the healthcare provider to determine if there are interactions with prescribed treatment.
4. Explain that the medical treatment plan must be followed as prescribed to be effective and that some medications/treatments take time to demonstrate effectiveness.
5. Discuss that traditions, such as sweat lodges may affect some conditions in detrimental ways. Healing customs or using a traditional healer may have a positive effect on the patient's condition.
6. Refer to clergy services, traditional healers, or other culturally appropriate resources.

DM-DP DISEASE PROCESS

OUTCOME: The patient/family will understand the basic pathophysiology and symptoms of Type 2 DM.

STANDARDS:

1. Briefly describe the pathophysiology of Type 2 DM, including the concept of insulin resistance.
2. Emphasize that the end-organ damage (e.g., kidney failure, blindness, heart attack, impotence, limb amputations) results from high blood glucose and that the goal of management is to keep blood glucose as near to normal as possible.
3. Describe risk factors for development and progression of Type 2 DM, e.g., family history, obesity, high intake of simple carbohydrates, sedentary lifestyle.

4. Describe feelings/symptoms that the patient may experience when blood glucose is high, e.g., increased thirst, increased urination, lethargy, headache, blurry vision, impaired concentration.
5. Emphasize that Type 2 DM is a chronic, controllable condition which requires permanent lifestyle alterations and continuous attention and medical care. **Refer to DM-LA.**

DM-EQ EQUIPMENT

OUTCOME: The patient/family will understand the home management and self-care activities necessary to control blood glucose and make a plan to integrate these activities into daily life.

STANDARDS:

1. Discuss the specific components of this patient's home glucose monitoring and/or home blood pressure monitoring and/or home ketone monitoring and/or home insulin pumps.
2. Demonstrate and receive return demonstration of home glucose monitoring and/or the use of other home equipment.
3. Explain that home glucose monitoring (when prescribed) is a tool to assist the patient in home management of blood glucose.
4. Discuss the importance of logging home glucose readings and insulin administration.
5. Emphasize the importance of home blood pressure monitoring as appropriate.
6. Emphasize the importance of bringing home monitoring records (e.g., blood pressure, glucose) to all medical appointments.

DM-EX EXERCISE

OUTCOME: The patient/family will understand the role of increased physical activity in achieving and maintaining good blood glucose control and will make a plan to increase regular activity by an agreed-upon amount.

STANDARDS:

1. Explain that increased daily activity will reduce the body's resistance to insulin.
2. Explain that the goal is at least 150 minutes of physical activity a week, for example, walking:
 - a. 30 minutes 5 days per week
 - b. 15 minutes bouts 2 times a day 5 days per week
 - c. 10 minutes bouts 3 times a day 5 days per week

3. Encourage the patient to increase the intensity of the activity as the patient becomes more fit.
4. Assist the patient in developing a personal exercise plan. **Refer to HPDP-EX.**
5. Discuss obstacles to a personal exercise plan and solutions to those obstacles.
6. Discuss medical clearance issues for physical activity.

DM-FTC FOOT CARE AND EXAMINATIONS

OUTCOME: The patient/family will understand the risks of skin breakdown, ulcers, and lower extremity amputation associated with Type 2 DM and will develop a plan for blood glucose control and regular foot care to prevent these complications.

STANDARDS:

1. Identify risks that can result in amputation. Stress that wounds do not heal properly if blood glucose is elevated.
2. Discuss the current recommendations for periodic foot screening.
3. Demonstrate the proper technique for a daily home foot check by patient or support person.
4. Discuss “do’s and don’ts” of diabetic foot care (e.g., don’t go barefoot, wear appropriate footwear, don’t trim your own nails and/or ingrown toe nails, don’t soak your feet).
5. Discuss the relationship between peripheral vascular disease, neuropathy, and high blood glucose. Explain that the progression to amputation is typical without early and appropriate intervention. **Refer to PVD.**
6. Emphasize the importance of footwear which is properly fitted for patients with diabetes. Refer for professional evaluation and fitting as appropriate.
7. Remind the patient to remove shoes for each clinic visit.
8. Emphasize the importance of a regularly scheduled detailed foot exam by a trained healthcare provider.

DM-FU FOLLOW-UP

OUTCOME: The patient/family will understand the importance of follow-up in the prevention of complications and progression and will develop a plan to make and keep follow-up appointments.

STANDARDS:

1. Emphasize the importance of early intervention to prevent complications.
2. Explain that regular medical appointments are necessary to monitor and to adjust treatment plans to attain blood glucose, blood pressure, and lipid control.

3. Explain that the home glucose and home blood pressure monitoring logs are tools for evaluating the treatment plan and should be brought to every appointment.
4. Explain that diabetes management involves many healthcare providers. Explain that since Type 2 DM is a chronic condition which affects the entire body, total care is essential. Emphasize the importance of keeping appointments with all healthcare providers, e.g., dental, eye care, foot care, laboratory.
5. Discuss the procedure for making appointments.

DM-HM HOME MANAGEMENT

OUTCOME: The patient/family will understand the home management and self-care activities necessary to control blood glucose and will make a plan to integrate these activities into daily life.

STANDARDS:

1. Discuss the specific components of this patient's home management (e.g., nutrition, exercise, home glucose monitoring, self-administration of insulin, taking medications).
2. Demonstrate and receive return demonstration of home glucose monitoring and/or insulin administration as appropriate.
3. Describe proper storage, care, and disposal of medicine and supplies.
4. Explain that home glucose monitoring (when prescribed) is a tool to assist the patient in home management of blood glucose.
5. Discuss the importance of logging home glucose readings and insulin administration and emphasize the importance of bringing the record to all medical appointments.
6. Emphasize the importance of daily foot checks and appropriate foot care. **Refer to DM-FTC.**
7. Emphasize the importance of good personal and oral hygiene. **Refer to HPDP-HY.**
8. Emphasize the importance of nutritional management. Refer to registered dietician or other local resources as appropriate.

DM-KID KIDNEY DISEASE

OUTCOME: The patient/family will understand the risks of kidney damage and end-stage renal disease resulting in dialysis associated with Type 2 DM and will develop a plan for blood glucose control and regular medical examinations to prevent these complications.

STANDARDS:

1. Emphasize that high blood glucose results in damage to the kidneys. This may result in renal failure requiring long term dialysis or kidney transplant. Once kidney damage occurs it cannot be reversed.
2. Emphasize the need for regular urine analysis and blood chemistry screening.
3. Emphasize that high blood pressure worsens diabetic kidney disease. Reinforce the importance of regular blood pressure screening and taking antihypertensive medications as prescribed. **Refer to HTN.**

DM-L LITERATURE

OUTCOME: The patient/family will receive literature about Type 2 DM.

STANDARDS:

1. Provide the patient/family with literature on Type 2 DM.
2. Discuss the content of the literature.

DM-LA LIFESTYLE ADAPTATIONS

OUTCOME: The patient/family will understand that the most important component in control of high blood glucose is the patient's lifestyle adaptations and will develop a plan to achieve optimal blood glucose control.

STANDARDS:

1. Emphasize that diet and exercise are the critical components of blood glucose control and medical therapies can at best supplement diet and exercise.
2. Emphasize that the end-organ damage (e.g., kidney failure, blindness, heart attack, impotence, limb amputations) results directly and indirectly from high blood glucose and that the goal of management is to keep blood glucose as near to normal as possible.
3. Explain that the longer the blood glucose is elevated, the greater the damage will be.
4. State the reasons for blood glucose monitoring – to keep track of the level of blood glucose and permit changes to the treatment plan necessary to keep glucose under control.

DM-M MEDICATIONS

OUTCOME: The patient/family will understand the prescribed medication regimen.

STANDARDS:

1. Explain that diet and exercise are the key components of control of Type 2 DM and that medication(s) may be prescribed as a supplement to nutrition planning and increased physical activity.
2. Describe the proper use, benefits, and common or important side effects of the patient's medication(s). State the name, dose, and time to take pills and/or insulin.
3. For patients on insulin, demonstrate steps in insulin administration. Describe proper storage, care, and disposal of medicine and supplies.
4. Reinforce the need to take insulin and other medications when sick and during other times of stress.
5. Emphasize the importance of full participation in the medication regimen. Explain that many medications for Type 2 DM do not exert an immediate effect and must be used regularly to be effective.
6. Briefly explain the mechanism of action of the patient's medications as appropriate.
7. Discuss any significant drug/drug or food/drug interactions, including interaction with alcohol.
8. Discuss the signs, symptoms, and appropriate actions for hypoglycemia.

DM-MNT MEDICAL NUTRITION THERAPY

OUTCOME: The patient and family will have an understanding of the specific nutritional intervention(s) needed for treatment or management of this condition, illness, or injury.

STANDARDS:

1. Explain that Medical Nutrition Therapy (MNT) is a systematic nutrition care process provided by a Registered Dietitian (RD) that consists of the following:
 - a. Assessment of the nutrition related condition.
 - b. Identification of the patient's nutritional problem.
 - c. Identification of a specific nutrition intervention therapy plan.
 - d. Evaluation of the patient's nutritional care outcomes.
 - e. Reassessment as needed.
2. Review the basic nutrition recommendations for the treatment plan.
3. Discuss the benefits of nutrition and exercise to health and well-being.
4. Assist the patient/family in developing an appropriate nutrition care plan.
5. Refer to other providers or community resources as needed.

DM-N NUTRITION

OUTCOME: The patient/family will understand the importance of nutritional management in the control of blood glucose and develop a plan to meet nutritional goals.

STANDARDS:

1. Emphasize that nutritional management includes meal planning, careful shopping, appropriate food preparation, and responsible eating.
2. Review the food guide pyramid and its role in meal planning. Refer to registered dietician or other local resources as appropriate.
3. Emphasize the importance of reading food labels. Instruct the patient/family as necessary.
4. Discuss the merits of various food preparation methods, e.g., broiling or baking is preferred over frying, avoid gravies and sauces, rinsing or blotting excess grease.
5. Emphasize the importance of appropriate serving sizes.
6. Emphasize that extra caution or planning is required when eating out, using USDA commodities, or going to special events since these foods are usually high in fat and sugar and serving sizes are often inappropriately large.
7. Emphasize that carbohydrates and low-fat proteins are preferred and that sugars and fats should be limited.

DM-ODM OCULAR DIABETES MELLITUS (RETINOPATHY)

OUTCOME: The patient and family will understand that uncontrolled diabetes mellitus can result in eye damage or blindness.

STANDARDS:

1. Explain that retinopathy is the leading cause of blindness in adults.
2. Discuss the importance of maintaining glycemic control to prevent retinopathy.
3. Discuss the relationship between peripheral vascular disease, retinopathy, and high blood glucose.
4. Discuss the current recommendations for annual retinal examination, and make appropriate referral.
5. **Refer to ODM** (Ocular Diabetes Mellitus).

DM-P PREVENTION

OUTCOME: The patient/family will understand major risk factors for development of Type 2 DM and will develop a plan for risk reduction.

STANDARDS:

1. Discuss the role of obesity in the development of Type 2 DM.
2. Emphasize that to maintain health and prevent diabetes, extra commitment is necessary for people with a family and/or gestational history of Type 2 DM.
3. Explain that following the food guide pyramid and maintaining adequate activity levels will reduce the risk of getting Type 2 DM.
4. Explain that many people have Type 2 DM for as much as 5–7 years before diagnosis, and that end-organ damage is occurring during that time. Emphasize the importance of regular screening. Discuss current recommendations for screening.
5. Explain that the child of a mother who had high blood glucose during pregnancy is at greatly increased risk for development of Type 2 DM. Emphasize that family planning, pre-conception screening, and early prenatal care can significantly reduce this risk.

DM-PD PERIODONTAL DISEASE

OUTCOME: The patient/family will understand the risk of uncontrolled diabetes mellitus as it relates to dental health.

STANDARDS:

1. Explain that gum disease can contribute to poor glycemic control.
2. Explain that gum disease can contribute to poor glycemic control.
3. Explain that the mouth (gums) contain highly vascular surface tissues that are easily damaged by poor glycemic control.
4. Explain that damage to gum tissues can result in loss of teeth and bone mass.
5. Discuss the current recommendation for annual dental examination and make appropriate referral.
6. Refer to PD (Periodontal Disease)

DM-PM PAIN MANAGEMENT

OUTCOME: The patient/family will understand the importance of appropriate management of pain.

STANDARDS:

1. Explain that lower extremity pain may be significant for complications associated with neuropathy which needs to be discussed with the medical provider.
2. Explain that the use of over the counter medications for chronic pain management needs to be assessed by the medical provider to minimize risk to kidney function.

3. Explain that all chest pain must be evaluated by the medical provider to rule out the possibility of myocardial infarction.
4. **Refer to PM or CPM.**

DM-SCR SCREENING

OUTCOME: The patient/family will understand the proposed screening test including indications.

STANDARDS:

1. Discuss the indication, risks, and benefits for the proposed screening test (e.g., guaiac, blood pressure, hearing, vision, development, mental health).
2. Explain the process and what to expect after the test.
3. Emphasize the importance of follow-up care.
4. Explain the recommended frequency of various screenings.

DM-SM STRESS MANAGEMENT

OUTCOME: The patient will understand the role of stress management in diabetes mellitus.

STANDARDS:

1. Explain that uncontrolled stress can contribute to insulin resistance and lead to increased morbidity and mortality.
2. Explain that uncontrolled stress can interfere with the treatment of diabetes mellitus.
3. Explain that effective stress management may reduce the adverse consequences of diabetes, as well as help improve the health and well-being of the patient.
4. Discuss that stress may exacerbate adverse health behaviors such as increased tobacco, alcohol or other substance use as well as overeating, all which can increase the risk of morbidity and mortality from diabetes mellitus.
5. Discuss various stress management strategies which may help maintain a healthy lifestyle. Examples may include:
 - a. Becoming aware of your own reactions to stress
 - b. Recognizing and accepting your limits
 - c. Talking with people you trust about your worries or problems
 - d. Setting realistic goals
 - e. Getting enough sleep
 - f. Maintaining a reasonable diet

- g. Exercising regularly
 - h. Taking vacations
 - i. Practicing meditation
 - j. Practicing self-hypnosis
 - k. Using positive imagery
 - l. Practicing physical relaxation methods such as deep breathing or progressive muscular relaxation
 - m. Participating in spiritual or cultural activities
6. Provide referrals as appropriate.

DM-TE TESTS

OUTCOME: The patient/family will understand the test to be performed and the reasons for the testing.

STANDARDS:

- 1. Explain the test(s) ordered, e.g., FBS, HgbA_{1C}, Fasting Lipid Profile.
- 2. Explain any necessary preparation prior to the test(s).
- 3. Explain the indications, risks and benefits of the test(s).
- 4. Explain the meaning of test results in relation to what “normal” results are.
- 5. Explain the test as it relates to planning the course of treatment.

DM-WC WOUND CARE

OUTCOME: The patient/family will understand the necessity and procedure for proper wound care. As appropriate, they will demonstrate the necessary wound care techniques.

STANDARDS:

- 1. Explain the reasons to appropriately care for the wound: decreased infection rate, improved healing, etc.
- 2. Explain the correct procedure for caring for this patient’s wound.
- 3. Explain signs or symptoms that should prompt immediate follow-up: increasing redness, purulent discharge, fever, increased swelling/pain, etc.
- 4. Detail the supplies necessary for the care of this wound (if any) and how/where they might be obtained.
- 5. Emphasize the importance of follow-up.